

# 2SC2480

## Silicon NPN epitaxial planer type

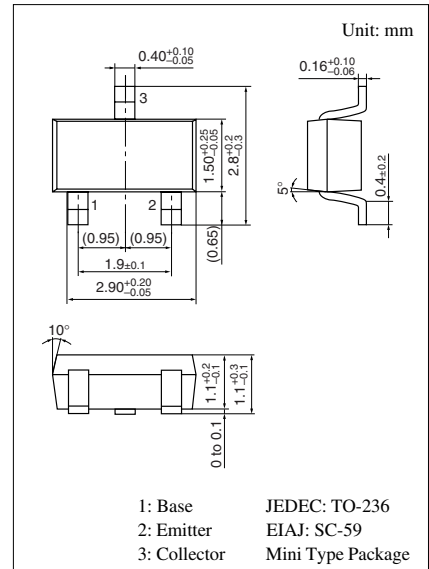
For high-frequency amplification / oscillation / mixing

### ■ Features

- High transition frequency  $f_T$
- Mini type package, allowing downsizing of the equipment and automatic insertion through the tape packing and the magazine packing.

### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector to base voltage	$V_{CBO}$	30	V
Collector to emitter voltage	$V_{CEO}$	20	V
Emitter to base voltage	$V_{EBO}$	3	V
Collector current	$I_C$	50	mA
Collector power dissipation	$P_C$	150	mW
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$



Marking Symbol: R

### ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector to base voltage	$V_{CBO}$	$I_C = 100 \mu\text{A}, I_E = 0$	30			V
Emitter to base voltage	$V_{EBO}$	$I_E = 10 \mu\text{A}, I_C = 0$	3			V
Forward current transfer ratio	$h_{FE}$	$V_{CB} = 10 \text{ V}, I_E = -2 \text{ mA}$	25		250	
Base to emitter voltage	$V_{BE}$	$V_{CB} = 10 \text{ V}, I_E = -2 \text{ mA}$		720		mV
Transition frequency *	$f_T$	$V_{CB} = 10 \text{ V}, I_E = -15 \text{ mA}, f = 200 \text{ MHz}$	800	1 300	1 600	MHz
Common emitter reverse transfer capacitance	$C_{re}$	$V_{CB} = 10 \text{ V}, I_E = -1 \text{ mA}, f = 10.7 \text{ MHz}$		1	1.5	pF
	$C_{rb}$	$V_{CE} = 6 \text{ V}, I_C = 0, f = 1 \text{ MHz}$		0.8		pF
Power gain	PG	$V_{CB} = 10 \text{ V}, I_E = -1 \text{ mA}, f = 200 \text{ MHz}$		20		dB

Note) \*: Rank classification

Rank	T	S	No-rank
$f_T$ (MHz)	800 to 1 400	1 000 to 1 600	800 to 1 600
Marking symbol	RT	RS	R

Product of no-rank is not classified and have no indication for rank.

